Notice No. MRA:11042001.bah

Public Notice Beginning Date: July 17, 2015

Public Notice Ending Date: August 17, 2015

National Pollutant Discharge Elimination System (NPDES)
Permit Program

PUBLIC NOTICE/FACT SHEET

of

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger: DuPage County Department of Public Works 421 North County Farm Road Wheaton, Illinois 60187 Name and Address of Facility:

DCDPW – Woodridge – Greene Valley STP
7900 South Route 53

Woodridge, Illinois 60517
(DuPage County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. All comments on the draft Permit and requests for hearing must be received by the IEPA by U.S. Mail, carrier mail or hand delivered by the Public Notice Ending Date. Interested persons are invited to submit written comments on the draft Permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the Permit applicant. The NPDES Permit and notice numbers must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft Permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft Permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final Permit is issued. For further information, please call Getie Yilma at 217/782-0610.

The following water quality and effluent standards and limitations were applied to the discharge:

Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter I: Pollution Control Board and the Clean Water Act were applied in determining the applicable standards, limitations and conditions contained in the draft Permit.

The applicant is engaged in treating domestic wastewater for the Village of Woodridge, Village of Lisle, City of Wheaton and unincorporated DuPage County.

DuPage County is a member of the DuPage River Salt Creek Workgroup.

The length of the Permit is approximately 5 years.

The main discharge number is 001. The seven day once in ten year low flow (7Q10) of the receiving stream, East Branch of DuPage River is 21.0 cfs. Facility also operates excess flow clarifier outfall (Outfall 003) with discharge to the Crabtree Creek. The seven day once in ten year low flow (7Q10) of the Crabtree Creek is 0 cfs.

The design average flow (DAF) for the facility is 12.0 million gallons per day (MGD) and the design maximum flow (DMF) for the facility is 28.6 MGD. Treatment consists of screening, grit removal, aeration, secondary clarification, trickling filtration, tertiary filtration, chlorination, gravity belt thickening, anaerobic digestion, sludge holding, sludge dewatering, and land application of sludge.

Public Notice/Fact Sheet -- Page 2 -- NPDES Permit No. IL0031844

This Reissued Permit does not increase the facility's DAF, DMF, concentration limits, and/or load limits.

Application is made for the existing discharge(s) which are located in DuPage County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

Discharge Number	Receiving Stream	<u>Latitude</u>	<u>Longitude</u>	Stream Classification	Integrity <u>Rating</u>
001	East Branch of DuPage River	41° 44′ 30″ North	88° 04′ 05″ West	General Use	Not Rated
003	Crabtree Creek	41° 44′ 33″ North	88° 03′ 58″ West	General Use	Not Rated

To assist you further in identifying the location of the discharge(s) please see the attached map.

The stream segment(s), waterbody segment GBL-02, receiving the discharge from outfall(s) 001 is on the 303(d) list of impaired waters.

The following parameters have been identified as the pollutants causing impairment:

Potential Causes	Uses Impaired
arsenic, methoxychlor and phosphorus (total)	aquatic life
polychlorinated biphenyls	fish consumption

Crabtree Creek receiving the discharge from outfall 003 is not on the 303 (d) list of impaired waters.

Public Notice/Fact Sheet -- Page 3 -- NPDES Permit No. IL0031844

The discharge(s) from the facility is (are) proposed to be monitored and limited at all times as follows:

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 12.0 MGD (design maximum flow (DMF) of 28.6 MGD).

The effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day DAF (DMF)*		CONCENTRATION <u>LIMITS mg/L</u>				
<u>Parameter</u>	Monthly Average	Weekly <u>Average</u>	Daily <u>Maximum</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Daily <u>Maximum</u>	Regulation
CBOD <sub>5</sub>	1001 (2385)		2002 (4770)	10		20	35 IAC 304.120 40 CFR 133.102
Suspended Solids	1201 (2862)		2402 (5725)	12		24	35 IAC 304.120 40 CFR 133.102
рН	Shall be in the	range of 6 to 9	Standard Units	6			35 IAC 304.125
Fecal Coliform	Daily Maximum shall not exceed 400 per 100 mL (May through October)					35 IAC 304.121	
Chlorine Residual**						0.4	35 IAC 302.208
Ammonia Nitrogen: April-Oct.	150 (358)		300 (716)	1.5		3.0	35 IAC 355 and 35 IAC 302
NovFeb.	400 (954)		801 (1908)	4.0		8.0	
March	200 (477)	500 (1193)	801 (1908)	2.0	5.0	8.0	
Total Nitrogen	Monitor Only						35 IAC 309.146
Total Phosphorus(as P)	Monitor Only						35 IAC 304.123
Chloride	Monitor Only						35 IAC 309.146
				Monthly Avg. not less than	Weekly Avg. not less than	Daily Minimum	
Dissolved Oxygen March-July				N/A	6.0	5.0	35 IAC 302.206
August-February				5.5	4.0	3.5	

<sup>\*</sup>Load Limits are calculated by using the formula: 8.34 x (Design Average and/or Maximum Flow in MGD) x (Applicable Concentration in mg/L).

<sup>\*\*</sup>Chlorine residual concentration limit is based on the results of a chlorine dissipation study completed by the facility.

Public Notice/Fact Sheet -- Page 4 -- NPDES Permit No. IL0031844

This Permit contains an authorization to treat and discharge excess flow as follows:

Discharge Number(s) and Name(s): 003 Clarifier Outfall

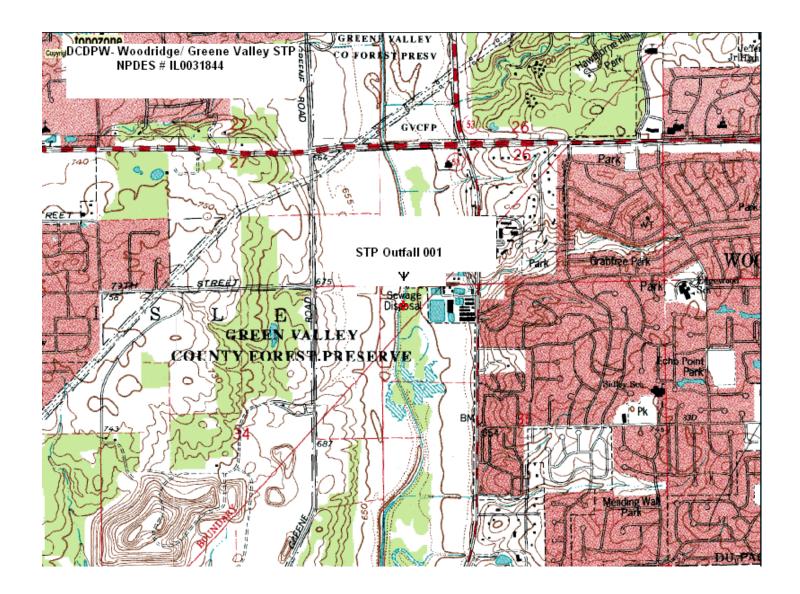
	CONCEN LIMITS		
<u>Parameter</u>	Monthly Average	Weekly Average	Regulation
BOD <sub>5*</sub>	30	45	40 CFR 133.102
Suspended Solids*	30	40 CFR 133.102	
Fecal Coliform	Daily maximum shall not ex	35 IAC 304.121	
рН	Shall be in the range of 6 to	35 IAC 304.125	
Chlorine Residual	0.	35 IAC 304.208	
Ammonia Nitrogen (as N)	Monito	35 IAC 309.146	
Total Phosphorus (as P)	Monito	35 IAC 309.146	
Dissolved Oxygen	Monito	35 IAC 309.146	

<sup>\*</sup>The 30-day average percent removal shall not be less than 85 percent.

This draft Permit also contains the following requirements as special conditions:

- 1. Reopening of this Permit to include different final effluent limitations.
- 2. Operation of the facility by or under the supervision of a certified operator.
- 3. Submission of the operational data in a specified form and at a required frequency at any time during the effective term of this Permit.
- 4. More frequent monitoring requirement without Public Notice in the event of operational, maintenance or other problems resulting in possible effluent deterioration.
- 5. Prohibition against causing or contributing to violations of water quality standards.
- 6. Recording the monitoring results on Discharge Monitoring Report Forms using one such form for each outfall each month and submitting the forms to IEPA each month.
- 7. The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated herein by reference.
- 8. Effluent sampling point location.
- 9. Controlling the sources of infiltration and inflow into the sewer system.
- 10. Seasonal fecal coliform limits.
- 11. Monitoring for arsenic, barium, cadmium, hexavalent chromium, total chromium, copper, weak acid dissociable cyanide, total cyanide, fluoride, dissolved iron, total iron, lead, manganese, mercury, nickel, oil, phenols, selenium, silver and zinc is required to be conducted semi-annually beginning 3 months from the effective date.
- 12. A requirement for biomonitoring of the effluent.
- Submission of semi annual reports indicating the quantities of sludge generated and disposed.
- 14. Reopening of this Permit to include revised effluent limitations based on a Total Maximum Daily Load (TMDL) or other water quality study.
- 15. Total nitrogen monitoring.
- 16. Submission of annual fiscal data.

- 17. Notification of changed industrial user.
- 18. Capacity, Management, Operations and Maintenance (CMOM) plan requirements.
- 19. A minimum of 85% removal of CBOD<sub>5</sub> and suspended solids.
- 20. Reasonable potential analysis and mixing study plan.
- 21. DuPage/ Salt Creek Condition



Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: Issue Date: Effective Date:

Name and Address of Permittee:

DuPage County Department of Public Works
421 North County Farm Road

Wheaton, Illinois 60187

Facility Name and Address:

DCDPW – Woodridge – Greene Valley STP
7900 South Route 53

Woodridge, Illinois 60517
(DuPage County)

Receiving Waters: East Branch of DuPage River and Crabtree Creek

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of the Ill. Adm. Code, Subtitle C, Chapter I, and the Clean Water Act (CWA), the above-named Permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the Permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E. Manager, Permit Section Division of Water Pollution Control

SAK:MRA:11042001.bah

## Effluent Limitations, Monitoring, and Reporting

## **FINAL**

Discharge Number(s) and Name(s): 001 STP Outfall

Load limits computed based on a design average flow (DAF) of 12.0 MGD (design maximum flow (DMF) of 28.6 MGD).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	LOAD LIMITS lbs/day <u>DAF (DMF)*</u>		CONCENTRATION LIMITS mg/L					
<u>Parameter</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	Daily <u>Maximum</u>	Monthly <u>Average</u>	Weekly <u>Average</u>	<u>Daily</u> <u>Maximum</u>	Sample <u>Frequency</u>	Sample <u>Type</u>
Flow (MGD)							Continuous	
CBOD <sub>5</sub> **,***	1001 (2385)		2002 (4770)	10		20	2 Days/Week	Composite
Suspended Solids***	1201 (2862)		2402 (5725)	12		24	2 Days/Week	Composite
рН	Shall be in the	range of 6 to	9 Standard U	nits			2 Days/Week	Grab
Fecal Coliform****	Daily Maximum shall not exceed 400 per 100 mL (May through October)					5 Days/Week	Grab	
Chlorine Residual****						0.4	5 Days/Week	Grab
Ammonia Nitrogen: as (N)								
April-Oct.	150 (358)		300 (716)	1.5		3.0	2 Days/Week	Composite
NovFeb.	400 (954)		801 (1908)	4.0		8.0	2 Days/Week	Composite
March	200 (477)	500 (1193)	801 (1908)	2.0	5.0	8.0	2 Days/Week	Composite
Total Nitrogen*****	Monitor Only						1 Day/Month	Composite
Phosphorus	Monitor Only						1 Day/Month	Composite
Chloride	Monitor Only						1 Day/Month	Grab
				Monthly Average not less than	Weekly Average not less than	Daily Minimum		
Dissolved Oxygen March-July				N/A	6.0	5.0	2 Days/Week	Grab
August-February				5.5	4.0	3.5	2 Days/Week	Grab

<sup>\*</sup>Load limits based on design maximum flow shall apply only when flow exceeds design average flow.

Flow shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

Fecal Coliform shall be reported on the DMR as a daily maximum value.

pH shall be reported on the DMR as minimum and maximum value.

Chlorine Residual shall be reported on DMR as daily maximum value.

Dissolved oxygen shall be reported on the DMR as a minimum value.

Total Phosphorus shall be reported on the DMR as a daily maximum value.

<sup>\*\*</sup>Carbonaceous BOD<sub>5</sub> (CBOD<sub>5</sub>) testing shall be in accordance with 40 CFR 136.

<sup>\*\*\*</sup>The 30-day average percent removal shall not be less than 85%. See Special Condition 19

<sup>\*\*\*\*</sup>See Special Condition 10.

<sup>\*\*\*\*\*</sup>See Special Condition 15.

## Effluent, Limitations, Monitoring, and Reporting

Discharge Number(s) and Name(s): 003 Clarifier Outfall

These flow facilities shall not be utilized until the main treatment facility is receiving its design maximum flow (flow in excess of 19,848 gpm).

From the effective date of this Permit until the expiration date, the effluent of the above discharge(s) shall be monitored and limited at all times as follows:

	CONCENTRATION LIMITS (mg/L)			
<u>Parameter</u>	Monthly Average	Weekly Average	Sample Frequency	Sample Type
Total Flow (MG)			Daily When Discharging	Continuous
BOD <sub>5</sub> **	30	45	Daily When Discharging	Grab
Suspended Solids**	30	45	Daily When Discharging	Grab
Fecal Coliform	Daily Maximum Shall not Exceed 400 per 100 mL		Daily When Discharging	Grab
рН	Shall be in the range of 6 to 9 Standard Units		Daily When Discharging	Grab
Chlorine Residual	0.75		Daily When Discharging	Grab
Ammonia Nitrogen (as N)	Monitor Only		Daily When Discharging	Grab
Total Phosphorus (as P)	Monitor Only		Daily When Discharging	Grab
Dissolved Oxygen	Monitor Only		Daily When Discharging	Grab

<sup>\*</sup>an explanation shall be provided in the comment section of the DMR should these facilities be used when the main treatment facility is not receiving Design Maximum Flow (DMF). The explanation shall identify the reasons the main facility is at a diminished treatment capacity. Additionally, the Permittee shall comply with the previsions of Special Condition 7.

Total flow in million gallons shall be reported on the Discharge Monitoring Report (DMR) in the quantity maximum column. The main treatment facility flow at the time that Outfall 003 is first utilized shall be reported in the comment section of the DMR in gallons per minute (gpm).

Report the number of days of discharge in the comments section of the DMR.

Fecal Coliform shall be reported on the DMR as daily maximum.

Chlorine Residual shall be reported on the DMR as monthly average.

pH shall be reported on the DMR as a minimum and a maximum.

BOD<sub>5</sub> and Suspended Solids shall be reported on the DMR a monthly and weekly average concentration.

Ammonia Nitrogen shall be reported on the DMR a monthly average and daily maximum value.

Total Phosphorus shall be reported on the DMR as a maximum value.

Dissolved Oxygen shall be reported on the DMR as a minimum Value.

<sup>\*\*</sup>The 30-day average percent removal shall not be less than 85 percent. See Special Condition 19.

<sup>\*\*\*</sup> See Special Condition 20.

# Influent Monitoring, and Reporting

The influent to the plant shall be monitored as follows:

Parameter	Sample Frequency	Sample Type
Flow (MGD)	Continuous	
BOD <sub>5</sub>	2 Days/Week and Daily when Outfall 003 is Discharging	Composite
Suspended Solids	2 Days/Week and Daily when Outfall 003 is Discharging	Composite

Influent samples shall be taken at a point representative of the influent.

Flow (MGD) shall be reported on the Discharge Monitoring Report (DMR) as monthly average and daily maximum.

 $\mathsf{BOD}_5$  and Suspended Solids shall be reported on the DMR as a monthly average concentration.

<u>SPECIAL CONDITION 1</u>. This Permit may be modified to include different final effluent limitations or requirements which are consistent with applicable laws and regulations. The IEPA will public notice the permit modification.

SPECIAL CONDITION 2. The use or operation of this facility shall be by or under the supervision of a Certified Class 1 operator.

<u>SPECIAL CONDITION 3</u>. The IEPA may request in writing submittal of operational information in a specified form and at a required frequency at any time during the effective period of this Permit.

<u>SPECIAL CONDITION 4</u>. The IEPA may request more frequent monitoring by permit modification pursuant to 40 CFR Section 122.63 and <u>Without Public Notice</u>.

<u>SPECIAL CONDITION 5</u>. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 III. Adm. Code 302.

<u>SPECIAL CONDITION 6.</u> The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR Form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the NetDMR program, can be obtained on the IEPA website, http://www.epa.state.il.us/water/net-dmr/index.html.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 25th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Attention: Compliance Assurance Section, Mail Code # 19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

SPECIAL CONDITION 7. The provisions of 40 CFR Section 122.41(m) & (n) are incorporated herein by reference.

<u>SPECIAL CONDITION 8.</u> Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

<u>SPECIAL CONDITION 9.</u> Consistent with permit modification procedures in 40 CFR 122.62 and 63, this Permit may be modified to include requirements for the Permittee on a continuing basis to evaluate and detail its efforts to effectively control sources of infiltration and inflow into the sewer system and to submit reports to the IEPA if necessary.

<u>SPECIAL CONDITION 10</u>. Fecal Coliform limits for Discharge Number 001 are effective May thru October. Sampling of Fecal Coliform is only required during this time period.

The total residual chlorine limit is applicable at all times. If the Permittee is chlorinating for any purpose during the months of November through April, sampling is required on a daily grab basis. Sampling frequency for the months of May through October shall be as indicated on effluent limitations, monitoring and reporting page of this Permit.

SPECIAL CONDITION 11. The Permittee shall conduct semi-annual monitoring of the effluent and report concentrations (in mg/l) of the following listed parameters. Monitoring shall begin three (3) months from the effective date of this permit. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

STOKET		IVIII III II III II
CODE	<u>PARAMETER</u>	reporting limit
01002	Arsenic	0.05 mg/L
01007	Barium	0.5 mg/L
01027	Cadmium	0.001 mg/L
01032	Chromium (hexavalent) (grab)	0.01 mg/L
01034	Chromium (total)	0.05 mg/L

## **Special Conditions**

01042	Copper	0.005 mg/L
00718	Cyanide (grab) (available*** or amenable to chlorination)	5.0 ug/L
00720	Cyanide (total) (grab not to exceed 24 hours)	5.0 ug/L
00951	Fluoride	0.1 mg/L
01045	Iron (total)	0.5 mg/L
01046	Iron (Dissolved)	0.5 mg/L
01051	Lead	0.05 mg/L
01055	Manganese	0.5 mg/L
71900	Mercury (grab)**	1.0 ng/L*
01067	Nickel	0.005 mg/L
00556	Oil (hexane soluble or equivalent) (Grab Sample only)	5.0 mg/L
32730	Phenols (grab)	0.005 mg/L
01147	Selenium	0.005 mg/L
01077	Silver (total)	0.003 mg/L
01092	Zinc	0.025 mg/L

Minimum Reporting Limits are defined as – (1) The minimum value below which data are documented as non-detects. (2) Three to ten times the method detection limit. (3) The minimum value of the calibration range.

All sample containers, preservative, holding times, analyses, method detection limit determinations and quality assurance/quality control requirements shall be in accordance with 40 CFR 136.

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

The Permittee shall provide a report briefly describing the permittee's pretreatment activities and an updated listing of the Permittee's significant industrial users. The list should specify which categorical pretreatment standards, if any, are applicable to each Industrial User. Permittees who operate multiple plants may provide a single report. Such report shall be submitted within six (6) months of the effective date of this Permit to the following addresses:

U.S. Environmental Protection Agency Region 5 77 West Jackson Blvd. Chicago, Illinois 60604

Attention: Water Assurance Branch Enforcement and Compliance

Illinois Environmental Protection Agency Division of Water Pollution Control Attention: Compliance assurance Section, Mail Code #19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

SPECIAL CONDITION 12. The Permittee shall conduct biomonitoring of the effluent from Outfall 001.

## **Biomonitoring**

- 1. Acute Toxicity Standard definitive acute toxicity tests shall be run on at least two trophic levels of aquatic species (fish, invertebrate) representative of the aquatic community of the receiving stream. Testing must be consistent with <a href="Methods for Measuring the Acute Toxicity">Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (Fifth Ed.)</a> EPA/821-R-02-012. Unless substitute tests are pre-approved; the following tests are required:
  - a. Fish 96 hour static LC<sub>50</sub> Bioassay using fathead minnows (Pimephales promelas).
  - b. Invertebrate 48-hour static LC<sub>50</sub> Bioassay using Ceriodaphnia.
- 2. Testing Frequency The above tests shall be conducted using 24-hour composite samples unless otherwise authorized by the IEPA. Samples must be collected in the 18th, 15th, 12th, and 9th month prior to the expiration date of this Permit.
- 3. Reporting Results shall be reported according to EPA/821-R-02-012, Section 12, Report Preparation, and shall be submitted to IEPA, Bureau of Water, Compliance Assurance Section within one week of receipt from the laboratory. Reports are due to the IEPA no later than the 16th, 13th, 10th, and 7th month prior to the expiration date of this Permit.

<sup>\*1.0</sup> ng/L = 1 part per trillion.

<sup>\*\*</sup>Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

<sup>\*\*\*</sup>US EPA Method OIA-1677.

- 4. Toxicity Should a bioassay result in toxicity to >20% of organisms test in the 100% effluent treatment, the IEPA may require, upon notification, six (6) additional rounds of monthly testing on the affected organism(s) to be initiated within 30 days of the toxic bioassay. Results shall be submitted to IEPA within (1) week of becoming available to the Permittee. Should any of the additional bioassays result in toxicity to ≥50% of organisms tested in the 100% effluent treatments, the Permittee shall immediately notify IEPA in writing of the test results.
- 5. Toxicity Reduction Evaluation and Identification Should the biomonitoring program identify toxicity and result in notification by IEPA, the permittee shall develop a plan for toxicity reduction evaluation and identification. This plan shall be developed and implemented in accordance with <u>Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants</u>, EPA/833B-99/002, and shall include an evaluation to determine which chemicals have a potential for being discharged in the plant wastewater, a monitoring program to determine their presence or absence and to identify other compounds which are not being removed by treatment, and other measures as appropriate. The Permittee shall submit to the IEPA its plan within ninety (90) days following notification by the IEPA. The Permittee shall implement the plan within ninety (90) days of notification date of the permittee above or other such date as is received by letter from IEPA.

The IEPA may modify this Permit during its term to incorporate additional requirements or limitations based on the results of the biomonitoring. In addition, after review of the monitoring results and toxicity reduction evaluation, the IEPA may modify this Permit to include numerical limitations for specific toxic pollutants and additional whole effluent toxicity monitoring to confirm the results of the evaluation. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 13. For the duration of this Permit, the Permittee shall determine the quantity of sludge produced by the treatment facility in dry tons or gallons with average percent total solids analysis. The Permittee shall maintain adequate records of the quantities of sludge produced and have said records available for U.S. EPA and IEPA inspection. The Permittee shall submit to the IEPA, at a minimum, a semi-annual summary report of the quantities of sludge generated and disposed of, in units of dry tons or gallons (average total percent solids) by different disposal methods including but not limited to application on farmland, application on reclamation land, landfilling, public distribution, dedicated land disposal, sod farms, storage lagoons or any other specified disposal method. Said reports shall be submitted to the IEPA by January 31 and July 31 of each year reporting the preceding January thru June and July thru December interval of sludge disposal operations.

Duty to Mitigate. The Permittee shall take all reasonable steps to minimize any sludge use or disposal in violation of this Permit.

Sludge monitoring must be conducted according to test procedures approved under 40 CFR 136 unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this Permit.

Planned Changes. The Permittee shall give notice to the IEPA on the semi-annual report of any changes in sludge use and disposal.

The Permittee shall retain records of all sludge monitoring, and reports required by the Sludge Permit as referenced in Standard Condition 25 for a period of at least five (5) years from the date of this Permit.

If the Permittee monitors any pollutant more frequently than required by this permit or the Sludge Permit, the results of this monitoring shall be included in the reporting of data submitted to the IEPA.

The Permittee shall comply with existing federal regulations governing sewage sludge use or disposal and shall comply with all existing applicable regulations in any jurisdiction in which the sewage sludge is actually used or disposed.

The Permittee shall comply with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish the standards for sewage sludge use or disposal even if the permit has not been modified to incorporate the requirement.

The Permittee shall ensure that the applicable requirements in 40 CFR Part 503 are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

Monitoring reports for sludge shall be reported on the form titled "Sludge Management Reports" to the following address:

Illinois Environmental Protection Agency Bureau of Water Compliance Assurance Section Mail Code #19 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

<u>SPECIAL CONDITION 14</u>. This Permit may be modified to include alternative or additional final effluent limitations pursuant to an approved Total Maximum Daily Load (TMDL) Study or upon completion of an alternate Water Quality Study.

<u>SPECIAL CONDITION 15</u>. Monitoring for Total Nitrogen is required to document the actual total nitrogen effluent concentration. The Permittee shall monitor the effluent for total nitrogen once per month. The monitoring shall be a composite sample and the results reported as a daily maximum on the Permittee's Discharge Monitoring Forms.

<u>SPECIAL CONDITION 16</u>. During January of each year the Permittee shall submit annual fiscal data regarding sewerage system operations to the Illinois Environmental Protection Agency/Division of Water Pollution Control/Compliance Assurance Section. The Permittee may use any fiscal year period provided the period ends within twelve (12) months of the submission date.

Submission shall be on forms provided by IEPA titled "Fiscal Report Form For NPDES Permittees".

#### SPECIAL CONDITION 17. Notification of Changed Industrial User

The Permittee shall notify the Illinois EPA and USEPA, in writing, of any:

- a.) Significant Industrial User of the Permittee's treatment works which has not been previously disclosed to the agency, or
- b.) anticipated or actual changes in the volume or quality of discharges by an industrial user that may result in the industrial user becoming a significant industrial user, or
- c.) anticipated or actual changes in the volume or quality of discharges by a Significant Industrial User that may require changes to the Significant Industrial User Individual Control Mechanism.

This notification shall be submitted as soon as possible and, where changes are proposed, must be submitted prior to the changes being made.

SPECIAL CONDITION 18. The Permittee shall work towards the goals of achieving no discharges from sanitary sewer overflows or basement back-ups and ensuring that overflows or back-ups, when they do occur do not cause or contribute to violations of applicable standards or cause impairment in any adjacent receiving water. Overflows from sanitary sewers are expressly prohibited by III. Adm. Code 306.304. In order to accomplish these goals, the Permittee shall develop, implement and submit to the IEPA a Capacity, Management, Operations, and Maintenance (CMOM) plan which includes an Asset Management strategy within twelve (12) months of the effective date of this Permit or review and revise any existing plan accordingly. The Permittee shall modify the Plan to incorporate any comments that it receives from IEPA and shall implement the modified plan as soon as possible. The Permittee should work as appropriate, in consultation with affected authorities at the local, county, and/or state level to develop the plan components involving third party notification of overflow events. The Permittee may be required to construct additional sewage transport and/or treatment facilities in future permits or other enforceable documents should the implemented CMOM plan indicate that the Permittee's facilities are not capable of conveying and treating the flow for which they are designed.

## The CMOM plan shall include the following elements:

## A. Measures and Activities:

- 1. A complete map and system inventory for the collection system owned and operated by the Permittee;
- 2. Organizational structure; budgeting; training of personnel; legal authorities; schedules for maintenance, sewer system cleaning, and preventative rehabilitation; checklists, and mechanisms to ensure that preventative maintenance is performed on equipment owned and operated by the Permittee;
- 3. Documentation of unplanned maintenance;
- An assessment of the capacity of the collection and treatment system owned and operated by the Permittee at critical
  junctions and immediately upstream of locations where overflows and backups occur or are likely to occur; use flow
  monitoring as necessary;
- 5. Identification and prioritization of structural deficiencies in the system owned and operated by the Permittee;
- Scheduled inspections and testing;
- 7. The Permittee shall develop and implement an Asset Management strategy to ensure the long-term sustainability of the collection system. Asset Management shall be used to assist the Permittee in making decisions on when it is most appropriate to repair, replace or rehabilitate particular assets and develop long-term funding strategies; and
- 8. Asset Management shall include but is not limited to the following elements:
  - a. Asset Inventory and State of the Asset;
  - b. Level of Service;
  - c. Critical Asset Identification;
  - d. Life Cycle Cost; and
  - e. Long-Term Funding Strategy.

- B. Design and Performance Provisions:
  - 1. Monitor the effectiveness of CMOM;
  - 2. Upgrade the elements of the CMOM plan as necessary; and
  - 3. Maintain a summary of CMOM activities.
- C. Overflow Response Plan:
  - 1. Know where overflows and back-ups within the facilities owned and operated by the Permittee occur;
  - 2. Respond to each overflow or back-up to determine additional actions such as clean up; and
  - 3. Locations where basement back-ups and/or sanitary sewer overflows occur shall be evaluated as soon as practicable for excessive inflow/infiltration, obstructions or other causes of overflows or back-ups as set forth in the System Evaluation Plan.
- D. System Evaluation Plan:
  - 1. Summary of existing SSO and Excessive I/I areas in the system and sources of contribution;
  - Evaluate plans to reduce I/I and eliminate SSOs;
  - 3. Special provisions for Pump Stations and force mains and other unique system components; and
  - 4. Construction plans and schedules for correction.
- E. Reporting and Monitoring Requirements:
  - 1. Program for SSO detection and reporting; and
  - 2. Program for tracking and reporting basement back-ups, including general public complaints.
- F. Third Party Notice Plan:
  - 1. Describes how, under various overflow scenarios, the public, as well as other entities, would be notified of overflows within the Permittee's system that may endanger public health, safety or welfare;
  - 2. Identifies overflows within the Permittee's system that would be reported, giving consideration to various types of events including events with potential widespread impacts;
  - 3. Identifies who shall receive the notification;
  - 4. Identifies the specific information that would be reported including actions that will be taken to respond to the overflow;
  - 5. Includes a description of the lines of communication; and
  - 6. Includes the identities and contact information of responsible POTW officials and local, county, and/or state level officials.

For additional information concerning USEPA CMOM guidance and Asset Management please refer to the following web site addresses. <a href="http://www.epa.gov/npdes/pubs/cmom\_guide\_for\_collection\_systems.pdf">http://www.epa.gov/npdes/pubs/cmom\_guide\_for\_collection\_systems.pdf</a> and <a href="http://water.epa.gov/type/watersheds/wastewater/upload/guide\_smallsystems">http://water.epa.gov/type/watersheds/wastewater/upload/guide\_smallsystems</a> assetmanagement bestpratices.pdf

<u>SPECIAL CONDITION 19</u>. Final Conditions - For Discharge No. 001 and 003 BOD $_5$  and Suspended Solids (85% removal required): In accordance with 40 CFR 133, the 30-day average percent removal shall not be less than 85 percent except as provided in Sections 133.103 and 133.105. The percent removal need not be reported to the IEPA on DMRs but influent and effluent data must be available, as required elsewhere in this Permit, for IEPA inspection and review. For measuring compliance with this requirement, 5 mg/L shall be added to the effluent CBOD $_5$  concentration to determine the effluent BOD $_5$  concentration.

<u>SPECIAL CONDITION NO. 21</u>. The Permittee shall participate in the DuPage River Salt Creek Workgroup (DRSCW). The Permittee shall work with other watershed members of the DRSCW to determine the most cost effective means to remove dissolved oxygen (DO) and offensive condition impairments in the DRSCW watersheds.

2. The Permittee shall ensure that the following projects and activities set out in the DRSCW Implementation Plan (April 16, 2015), are completed (either by the permittee or through the DRSCW) by the schedule dates set forth below; and that the short term objectives are achieved for each by the time frames identified below:

Project Name	Completion Date	Short Term Objectives	Long Term Objectives
Oak Meadows Golf Course dam removal	December 31, 2016	Improve DO	Improve fish passage
Oak Meadows Golf Course stream restoration	December 31. 2017	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi
Fawell Dam Modification	December 31, 2018	Modify dam to allow fish passage	Raise fiBi upstream of structure
Spring Brook Restoration and dam removal	December 31, 2019	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
Fullersburg Woods dam modification concept plan development	December 31, 2016	Identify conceptual plan for dam modification and stream restoration	Build consensus among plan stakeholders
Fullersburg Woods dam modification	December 31, 2021	Improve DO, improve aquatic habitat (QHEI)	Raise miBi and fiBi
Fullersburg Woods dam modification area stream restoration	December 31, 2022	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
Southern West Branch Physical Enhancement	December 31, 2022	Improve aquatic habitat (QHEI)	Raise miBi and fiBi
Southern East Branch Stream Enhancement	December 31, 2023	Improve aquatic habitat (QHEI), reduce inputs of nutrients and sediment	Raise miBi and fiBi
QUAL 2K East Branch and Salt Creek	December 31, 2023	Collect new baseline data and update model	Quantify improvements in watershed. Identify next round of projects for years beyond 2024.

## **Special Conditions**

NPS Phosphorus	December 31,	Assess NPS	Reduce NPS
Feasibility Analysis	2021	performance from reductions leaf litter and street sweeping	contributions to lowest practical levels

- 3. The Permittee shall participate in implementation of a watershed Chloride Reduction Program, either directly or through the DRSCW. The program shall work to decrease DRSCW watershed public agency chloride application rates used for winter road safety, with the objective of decreasing watershed chloride loading. The Permittee shall submit an annual report on the annual implementation of the program identifying the practices deployed, chloride application rates, estimated reductions achieved, analyses of watershed chloride loads, precipitation, air temperature conditions and relative performance compared to a baseline condition. The report shall be provided to the Agency by March 31 of each year reflecting the Chloride Abatement Program performance for the preceding year (example: 2015-16 winter season report shall be submitted no later than March 31, 2017). The Permittee may work cooperatively with the DRSCW to prepare a single annual progress report that is common among DRSCW permittees.
- 4. The Permittee shall submit an annual progress report on the projects listed in the table of paragraph 2 above to the Agency by March 31 of each year. The report shall include project implementation progress. The Permittee may work cooperatively with the DRSCW to prepare a single annual progress report that is common among DRSCW permittees.
- 5. The Permittee shall develop a written Phosphorus Discharge Optimization Plan. In developing the plan, the Permittee shall evaluate a range of measures for reducing phosphorus discharges from the treatment plant, including possible source reduction measures, operational improvements, and minor low cost facility modifications that will optimize reductions in phosphorus discharges from the wastewater treatment facility. The permittee's evaluation shall include, but not necessarily be limited to, an evaluation of the following optimization measures:
  - a. WWTF influent reduction measures.
    - i. Evaluate the phosphorus reduction potential of users.
    - ii. Determine which sources have the greatest opportunity for reducing phosphorus (e.g., industrial, commercial, institutional, municipal, and others).
      - 1. Determine whether known sources (e.g., restaurant and food preparation) can adopt phosphorus minimization and water conservation plans.
      - 2. Evaluate implementation of local limits on influent sources of excessive phosphorus.
  - b. WWTF effluent reduction measures.
    - Reduce phosphorus discharges by optimizing existing treatment processes without causing non-compliance with permit effluent limitations or adversely impacting stream health.
      - 1. Adjust the solids retention time for biological phosphorus removal.
      - 2. Adjust aeration rates to reduce DO and promote biological phosphorus removal.
      - 3. Change aeration settings in plug flow basins by turning off air or mixers at the inlet side of the basin system.
      - 4. Minimize impact on recycle streams by improving aeration within holding tanks.
      - 5. Adjust flow through existing basins to enhance biological nutrient removal.
      - 6. Increase volatile fatty acids for biological phosphorus removal.
- 6. Within 24 months of the effective date of this permit, the Permittee shall finalize the written Phosphorus Discharge Optimization Evaluation Plan and submit it to IEPA. The plan shall include a schedule for implementing all of the evaluated optimization measures that can practically be implemented and include a report that explains the basis for rejecting any measure that was deemed impractical. The schedule for implementing all practical measures shall be no longer than 36 months after the effective date of this permit. The Permittee shall implement the measures set forth in the Phosphorus Discharge Optimization Plan in accordance with the schedule set forth in that Plan. The Permittee shall modify the Plan to address any comments that it receives from IEPA and shall implement the modified plan in accordance with the schedule therein.

Annual progress reports on the optimization of the existing treatment facilities shall be submitted to the Agency by March 31 of each year beginning 24 months from the effective date of the permit.

- 7. The Permittee shall, within 24 months of the effective date of this permit, complete a feasibility study that evaluates the timeframe, and construction and O & M costs of reducing phosphorus levels in its discharge to a level consistently meeting a limit of 1 mg/L, 0.5 mg/L and 0.1 mg/L utilizing a range of treatment technologies including, but not necessarily limited to, biological phosphorus removal, chemical precipitation, or a combination of the two. The study shall evaluate the construction and O & M costs of the different treatment technologies for these limits on a monthly, seasonal, and annual average basis. For each technology and each phosphorus discharge level evaluated, the study shall also evaluate the amount by which the Permittee's typical household annual sewer rates would increase if the Permittee constructed and operated the specific type of technology to achieve the specific phosphorus discharge level. Within 24 months of the effective date of this Permit, the Permittee shall submit to the Agency and the DRSCW a written report summarizing the results of the study.
- 8. Total phosphorus in the effluent shall be limited as follows:
  - a. If the Permittee will use chemical precipitation to achieve the limit, the effluent limitation shall be 1.0 mg/L on a monthly average basis, effective 10 years after the effective date of this permit unless the Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program pursuant to paragraph c or d below that is fully implemented within 10 years of the effective date of this permit.
  - b. If the Permittee will primarily use biological phosphorus removal to achieve the limit, the effluent limitation shall be 1.0 mg/L monthly average to be effective 11 years after the effective date of this permit unless the Agency approves and reissues or modifies the permit to include an alternate phosphorus reduction program pursuant to paragraph c or d below that is fully implemented within 11 years of the effective date of this permit.
  - c. The Agency may modify this permit if the DRSCW has developed and implemented a trading program for POTWs in the DRSCW watersheds, providing for reallocation of allowed phosphorus loadings between two or more POTWs in the DRSCW watersheds, that delivers the same results of overall watershed phosphorus point-source reduction and loading anticipated from the uniform application of the applicable 1.0 mg/L monthly average effluent limitation among the POTW permits in the DRSCW watersheds and removes DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203.
  - d. The Agency may modify this permit if the DRSCW has demonstrated and implemented an alternate means of reducing watershed phosphorus loading to a comparable result within the timeframe of the schedule of this condition and removes DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aguatic algae criteria in 35 IL Adm. Code 302.203.
- 9. The Permittee shall monitor the wastewater effluent, consistent with the monitoring requirements on Page 2 of this permit, for total phosphorus, dissolved phosphorus, nitrate/nitrite, total Kjeldahl nitrogen (TKN), ammonia, total nitrogen (calculated), alkalinity and temperature at least once a month. The Permittee shall monitor the wastewater influent for total phosphorus and total nitrogen at least once a month. The results shall be submitted on NetDMRs to the Agency unless otherwise specified by the Agency.
- 10. The Permittee shall submit a Nutrient Implementation Plan (NIP) for the DRSCW watersheds that identifies phosphorus input reductions by point source discharges, non-point source discharges and other measures necessary to remove DO and offensive condition impairments and meet the applicable dissolved oxygen criteria in 35 IL Adm. Code 302.206 and the narrative offensive aquatic algae criteria in 35 IL Adm. Code 302.203. The NIP shall also include a schedule for implementation of the phosphorus input reductions and other measures. The Permittee may work cooperatively with the DRSCW to prepare a single NIP that is common among DRSCW permittees. The NIP shall be submitted to the Agency by December 31, 2023.